

THE PACIFIC COAST ARCHITECT



Engineering
Library
GENERAL LIBRARY
APR 14 1915
UNIV. OF MICH.

A MONTHLY JOURNAL FOR THE
ARCHITECTURAL INTERESTS

SAN FRANCISCO
CALIFORNIA

VOLUME NINE
NUMBER FOUR

APRIL, 1915

Sixty Years

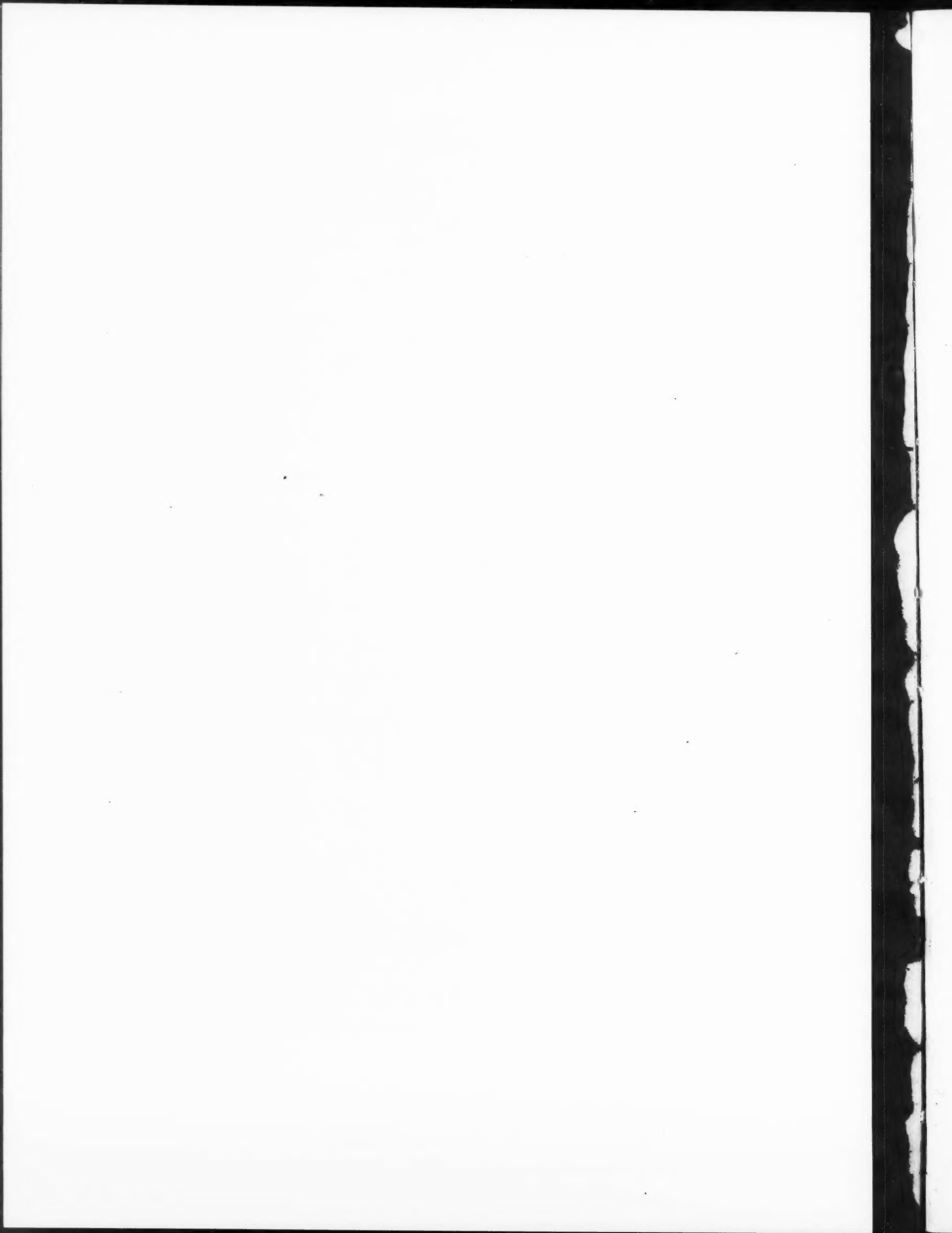
THAT'S how long we've been making paint. And if you want the benefit of our sixty years' experience, you have only to specify:

Pioneer White Lead
Washable Wall Finish
Japanese Oil Stains
Fuller Varnishes
Concreta
Pioneer Shingle Stains

ALL MADE BY

W. P. Fuller & Co.

San Francisco	Los Angeles
Oakland	Portland
Sacramento	Seattle
Stockton	Tacoma
Pasadena	Spokane
Long Beach	Boise
Santa Monica	San Diego





The Pacific Coast Architect



VOLUME IX

SAN FRANCISCO, CALIFORNIA, APRIL, 1915

NUMBER 4

THE PACIFIC COAST ARCHITECT

J. A. DRUMMOND - - - - - Editor and Publisher
CLARENCE P. KANE - - - - - Assistant Editor

PUBLISHED ON THE FIRST OF EACH MONTH AT
725 CHRONICLE BLDG., SAN FRANCISCO, CAL.

Subscription in the United States and possessions
\$5.00 a Year. Foreign and Canadian \$6.00 a Year
Single copies, each 50 cents

Entered as Second-class matter at the Post-office at San Francisco

Changes in, or copy for new advertisements must reach the office of publication
not later than the Fifteenth of the month preceding issue.

The Editor will be pleased to consider contributions of interest to the readers of
this publication. When payment for same is desired this fact should be
stated. Self-addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION

TEL. DOUGLAS 3424



EDITORIAL



Architects Complete Meritorious Work

The editor believes that this issue of "The Pacific Coast Architect" will be of unusual interest to the profession, as we are herewith illustrating and describing a work of exceptional merit, from an architectural standpoint, and, in which is embodied a number of ideas that are certain to pave the way for repetition in future construction of banks. We refer to the Merchants National Bank of Los Angeles, the work of the firm of architects, William Curlett & Son, and carried on after the death of the late Mr. Curlett by his son, Aleck E. Curlett. Mr. Aleck Curlett has surely erected a wonderful institution, which fact has been readily attested by many people, and it is our hope that the accompanying illustrations and text will serve in some degree to present to our readers a proper conception of the completed building as it stands today.



Anticipations and Hopes Encompassed

An immediate and most welcome result of the opening of the Panama-Pacific International Exposition has been the circulation in that city and vicinity, of a considerable quantity of currency. Certain it is that every merchant is benefited to some extent by the many visitors who are arriving in increasing numbers daily.

It is not necessary to refer to the large attendance at the exposition on the opening days. This was expected, as practically every one in San Francisco, and tributary territory, made it a point to visit the grounds at some time during the first few weeks.

The most satisfactory fact, however, is the continued large attendance at the Exposition, which forcibly indicates that outsiders are continually arriving here.

This all makes for good business and in no small wise has encompassed prior anticipation and hopes. Every indication points to one of the most successful expositions ever held.

It is also gratifying to know that the daily attendance at the Panama-California Exposition at San Diego has been greatly swelled within the past four weeks, and that the southern city is now assured of a successful exposition, financially as well as physically.



Endorse City Planning Commissions

The Southern California Chapter of American Institute of Architects, has endorsed pending State legislation, for the appointment of city planning commissions in all un-chartered cities of California, and creating a State Architect with purely advisory capacity. At the recent meeting of that body, Mr. Charles Henry Cheney, of San Francisco, architect and city planner, addressed the members, exhibiting stereopticon views, showing bad housing conditions in certain large cities, and provisions that have been made for bettering these conditions in some of the larger cities, notably the model tenements of Berlin and New York City, and the garden cities of England. His address was very timely and has aroused considerable interest, culminating in part in the endorsement of the chapter, as above stated. Mr. Cheney told of the general features of the pending legislation as proposed in bills under the fathership of State Immigration and Housing Commission.

We are sure that the interest that is shown by such an active organization will result in some tangible good. The members of the Southern California Institute of Architects are in a position to work on such lines where the work will do the most good. The chapter has already incited to action, officials of Los Angeles and other Southern California cities, along the city planning idea. In the future, a more wide adoption of the idea is certain to follow.



Annual Report on Academy in Rome

The annual report of the American Academy in Rome, February 10, 1914—December 22, 1914—has just been published in handsome book form. The brochure shows many fine photographic reproductions of the academy and the text matter should prove of interest to architects. Therein is a report of the director of the academy, which tells of the many problems which confronted the institution after the outbreak of the war and the successful issuance out of same which has culminated the efforts of the executive committee.

Merchants National Bank, Los Angeles

The latest large banking institution to move into new quarters in the city of Los Angeles was the Merchants National Bank. The new banking room illustrated in the following pages was taken possession of by this bank on the 14th day of October, 1914.

The Merchants National Bank Building is situated on the northeast corner of Spring and Sixth Streets, on a lot 120 feet frontage by 157 feet deep, extending back to an alley. The building is twelve stories high, the two lower stories are of granite and the upper stories of light cream matt glazed terra cotta.

From the architects' standpoint the working conditions were ideal, as the drawings for the banking work were started at the same time as those for the building, so that every point could be studied out in advance, and no structural changes were necessary to accommodate the banking equipment.

Both the building and the banking quarters are the work of the firm of architects, William Curlett & Son, of San Francisco and Los Angeles.

Soon after the building was started, the death of Mr. William Curlett occurred. His son, Aleck E. Curlett, immediately went to Los Angeles, carried on the drawings to completion and took charge of the construction of this work. Mr. Curlett has decided to remain in Los Angeles permanently and is carrying on his business under the original firm name of William Curlett & Son.

The plan of the building has been studied from the standpoint of securing as much effect as possible from the central skylight. This large skylight is on the axis of the banking room and gives great height and dignity to the design. All columns on the first floor are carried through to the roof, as it was found possible to so plan this work that no offsetting of columns would be necessary.

The large skylight has a span of forty feet, carried upon steel trusses and supporting a false domed ceiling light. This ceiling treatment is the dominating feature of the bank.

The entrance to the banking room is through five large ornamental bronze doorways, from Spring Street. All small vestibule entrances have been done away with and the whole front of the room thrown open.

The safe deposit vestibule in the basement has a separate entrance from the front of the office building lobby from Spring Street and from the banking room, making it very flexible so that any part may be thrown open or kept closed without interfering with any other department.

The officers' quarters are located along the Sixth Street side of the building, the president occupying a very large beautiful office at the corner. The richly carved white marble doorway to this private office is one of the very many beautifully executed details of this bank.

At the rear of the president's office are the offices of the vice-president, cashier and assistant cashier. These officers all have desks on an open platform with their private rooms directly adjoining. All the private offices are treated with American walnut, richly carved and finished. All the furniture is of the same wood, all specially designed by the architect.

The working space extends around the three sides of the room, with uninterrupted communication with all departments. Officers or employees may go to any department of the bank without passing at any time through the public space.

The public lobby is furnished with white marble tables, seats, etc., and bronze check racks. The marble and bronze furniture displayed by this bank in its public lobby have no equal anywhere on the Pacific Coast.

The general treatment of the main room is white, grey and gold marble, with a ceiling treatment carrying out the same color scheme. The floor is of pink Tennessee marble in large squares of very simple pattern, giving a good foundation for the setting off of the other work.

The counter faces, bases, railings, etc., are all of Old Convent grey Sienna marble, imported from Italy especially for this work. All this richly colored marble was cut from one exceptionally large block and is perfect in color and in matching.

The walls, columns, piers, etc., are all of white Colorado marble. The columns are faced with slabs of this marble, one and one-half inches thick, twenty-four inches wide and eighteen feet six inches high. The fabricating and setting of these long thin slabs was a very difficult piece of work and are set perfectly.

The ceiling treatment is elaborate in detail and very rich in color. The color is kept in a low key, thus lending an appearance of great height to the room.

The front part of the basement is used for the safe deposit lobby, all treated in white Colorado marble and Southern red gum. The large manganese steel vaults are the very last word in vault design and the front of the safe deposit vault is treated with polished steel plates with steel ornamental work quite unique in character.

The rear of the basement is used for coin vault, book vault, stationery vault, storage vault, etc., all facing upon a passageway protected by a heavy steel grille.

The plan of the service basement is decidedly out of the ordinary in the method of placing the vaults. The employees use a private stair from the rear of the first floor, which leads to a large vestibule, off of which opens the locker rooms, lavatories, store rooms, etc. Separated from this employees' vestibule by a steel grille is another vestibule, off of which opens the various vaults. All vault doors may be seen from the employees' vestibule by the watchman, yet no one can gain access to any of these vaults except the proper authorities. This eliminates the objection of vault doors standing open while employees, janitors, etc., are passing back and forth.

The coin, securities, etc., are brought down from the first floor to the vault lobby by a special elevator.

The mezzanine floor is used for the directors' room, auditors' room, officers' lavatories and dressing rooms, and the rear of this floor, facing the alley, is used for a large accounting and clerical department.

The metal work in the banking room is in solid bronze throughout, much of which is very beautiful and novel in design, particularly the counter screen and wickets. Modern banking design seems to tend toward the lighting of the counter screen, eliminating to a great extent all heavy marble or metal and using plate glass instead. This idea has been carried out by Mr. Curlett in an extremely light and delicate treatment, yet very rich in its lines and ornamentation. The plate glass itself is used in decorative manner with etched lines and borders. All heavy members have been removed from this design, so as not to mar its delicacy in any particular. The bronze is finished in a rich natural tone, blending in wonderfully well with the yellow and gold tones of the Sienna marble counter die.

The cage work in some particulars is quite out of the ordinary, although the main points of difference would only be noticed upon a more careful inspection than is shown by these photographs. Here again plate glass is made to count as much as possible, doing away with all heavy metal members wherever they could be omitted. Standing in the cages one has a sense of openness and spaciousness, quite in contrast to the average cage, where one is inclined to feel somewhat confined, on account of the great quantity of metal bars and grille work used.

The cages for the tellers are smaller than the average and the size used has met with a great deal of favorable comment from the clerks using them, as the saving of time and movements amounts to a good deal at the end of the day.

All filing devices are made to revolve or swing so that they may be used by both tellers.

All cage work and filing devices, etc., are interchangeable, as everything has been worked out on a unit basis.

Modern Bank Vault Construction

Probably for the first time in history a bank's vault has been used as a fortification. The vaults shipped by The Mosler Safe Co. at Hamilton, Ohio, to the Merchants' National Bank, Los Angeles, were sent by water from New York and over the Mexican railway to secure a lower freight rate, and landed at Vera Cruz, Mexico, just as hostilities broke out between the United States and Mexico. The shipment was on several vessels, one of which was detained by the United States authorities and used to house refugees, who were finally returned on it to New York City. Other vessels had unloaded their cargoes in Mexican ports and the revolutionists in Mexico were not slow to see the advantages of using the massive steel vault sections for barricades. Meanwhile the bank building in Los Angeles was nearing completion and as all American railroad officials had been compelled to leave Mexico it seemed for a time that the vault would be permanently lost. The Remington Company of Los Angeles, who were the engineers responsible for the installation of the vaults, finally by cable and telegraph obtained its release and by securing special transportation accommodations by rushing its erection, the vault was actually completed and ready to use a month before the bank was ready to move in.

The vaults, however, are of more interest to architects and bankers for their construction features. It has been universally conceded by vault manufacturers that manganese steel was the best material yet discovered for the construction of burglar-proof safes, but had been a failure so far as its use for vault linings and vault doors was concerned until a recent discovery in the factory of the Mosler Safe Co. at Hamilton, Ohio, completely revolutionized the method of constructing it. Several manganese steel vaults were constructed for banks in and around New York City, but the difficulty experienced in fastening the various sections of ferro manganese together made the vaults extremely costly, cumbersome, and many architects and engineers considered them structurally weak at the corners.

Manganese steel possesses the peculiar quality of retaining its drill-proof properties regardless of temperature,—that is, its temper cannot be withdrawn by any known annealing process. Unlike other steels, therefore, it cannot be fabricated in the factory and the various sections bolted together before tempering. The edges of the castings can be brought to a close fit by grinding, but the difficulty lies in fastening the various sections together so that there will not be any projections inside of the structure or a structural weakness at the joints of the castings. Two years of experimenting were necessary before the desired result was accomplished and the vaults illustrated in this issue are the result of these labors.

Earle Remington, the vault engineer for The Remington Company, Los Angeles, had been employed nearly six years by the various safe companies in experimenting with high explosives and various burning methods under burglarious conditions. Every commercial steel was tested and nearly every known insulating material subjected to attacks by electric arc, thermit and the oxy-acetylene blow-pipe. Manganese steel stood the best test, and as a result of the invention before referred to, which is now controlled by patents of The Mosler Safe Co., the manganese vault is now on a commercial basis,—that is, can be supplied at a price at which the bankers can afford to consider it. Probably no vault ever sent to the Pacific Coast was constructed under so rigid an inspection at the factory and during its erection as was this one. Steel experts retained by the architects, Wm. Curlett & Son, analyzed the material, tested every section during its course of manufacture and during its erection every joint was inspected to make certain that it fitted perfectly to its adjoining member. As a matter of fact, had there been the slightest variation in a vault of this size, it would have been impossible to have installed it, as the work was fitted to one-sixty-fourth of an inch.

The casual visitor to the bank or renter of one of its many boxes notices its conveniences, but seldom realizes that it is the evidence of the silent struggle constantly going on between the burglar and the experts of the great factory that constructs the vault. The safe-deposit vault has a capacity for about ten thousand boxes, about five thousand of which are now being used. Two circular doors of manganese steel guard the entrance to the cash and safe-deposit vaults. By lowering a section of the floor outside of the vault when the doors are opened and raising same after they have been opened, a perfectly level entrance is afforded into the vault so that an invalid's chair can be wheeled into same without difficulty.

Concealed ducts bring fresh air into the vaults, thoroughly ventilating same at all times. Electric indicators and pilot lights show when the vaults have been properly locked and telephone communication inside of the vault secures the release of anyone accidentally locked therein. The vaults, while handsomely finished in polished steel throughout, are severely plain in their ornamentation, following the latest modern practice of vault engineers, who hold that the appearance of strength (which is the primary object of the vault) is best secured by the elimination of fancy ornamentation and "ginger-bread work."

The cash vault is provided with individual lockers for each teller. The current cash of the bank is transferred from the tellers' cages on the main floor to the vaults in the basement on specially designed omnibuses, which are lowered on an elevator in the working space. For the cash reserve heavier chests are used. There are separate

trunk, book and storage vaults, the doors of which are of lighter construction, the protection on them being mainly against fire. Manganese steel has been used throughout for the cash and safe-deposit vaults, both for the vault structure itself and its doors. The castings of the circular doors are interlocking and keyed together somewhat in the manner used in fastening the breech of a heavy gun. On the vault linings a somewhat different method is used. The former weakness of the corners has been eliminated by making a cast arch of solid manganese so that there is now no joint at the corners. The walls, floor and ceiling are constructed of plates about ten feet long and three feet wide; the edges being rabbeted and ground to a close fit. The joints are covered with battens of soft steel, which are attached to the manganese plates by a process controlled by The Mosler Safe Co. These battens are screwed together from the inside of the vault so that the whole structure is rigidly fastened. These screws, however, do not penetrate into or thru the manganese steel box and the burglar being compelled to attack from the outside has no access to them. The doors are ground to a perfect fit by exactly the same method as is employed in grinding the valve of an automobile engine, only on a larger scale and by the use of special machinery. This prevents the introduction of liquid explosives into the

joints of the door. The locking mechanism of the doors is controlled by timelocks and combination locks, and the doors are so perfectly balanced that in spite of their enormous weight they are easily swung on their hinges and closed.

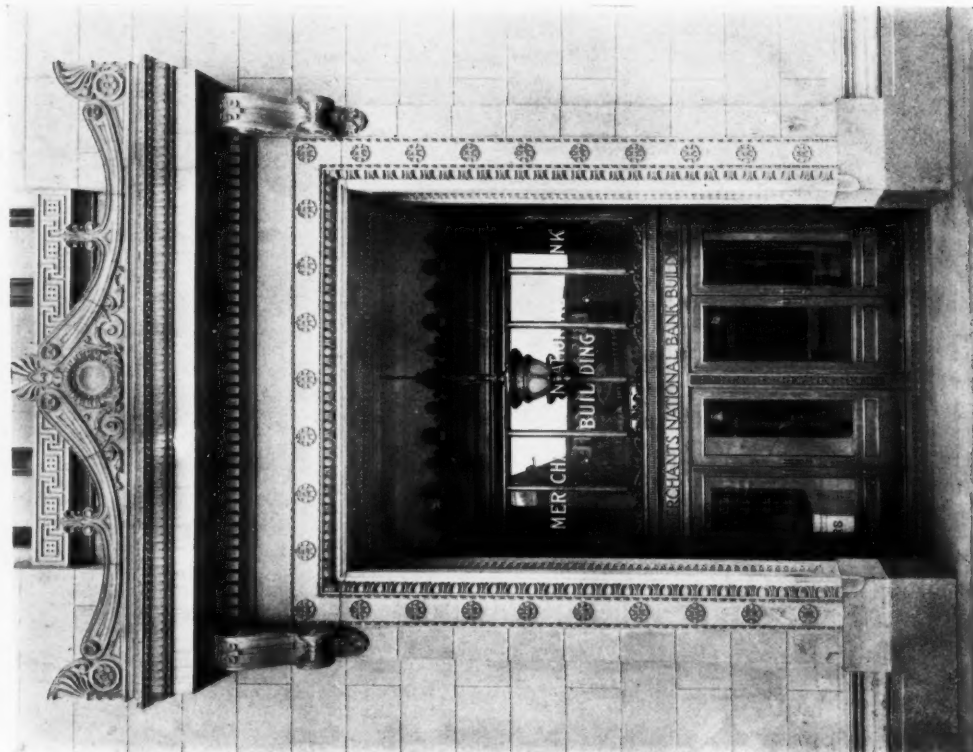
The Remington Company are vault and bank interior specialists who have designed nearly all the heavy vault work on the Coast. Geo. L. Remington, who died about a year ago, was the recognized authority on vaults and predicted that manganese would supplant armor plate and laminated vault linings. The son, Earle Remington, states that square vault doors will soon be on the market constructed of manganese steel at a much lower cost than the circular doors, so that the smaller banks can afford them. Geo. L. Remington executed the Philadelphia and New Orleans mints and the Treasury vaults at Washington, D. C., and at this time the United States Government is investigating manganese vaults and issued a call for bids on same for the new vaults at Balboa in the Panama Canal zone. Construction details of the vaults are not published, because of the possibility of educating cracksmen, but are available for any architect interested in the subject.

The following illustration shows the interior of the safe-deposit vault.



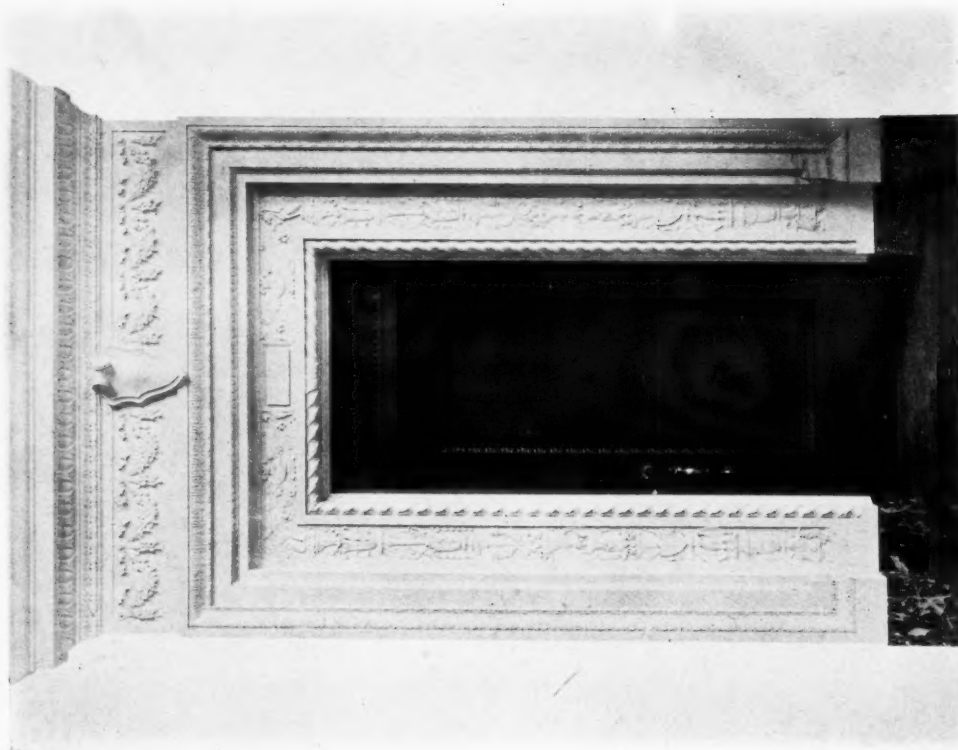


Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles

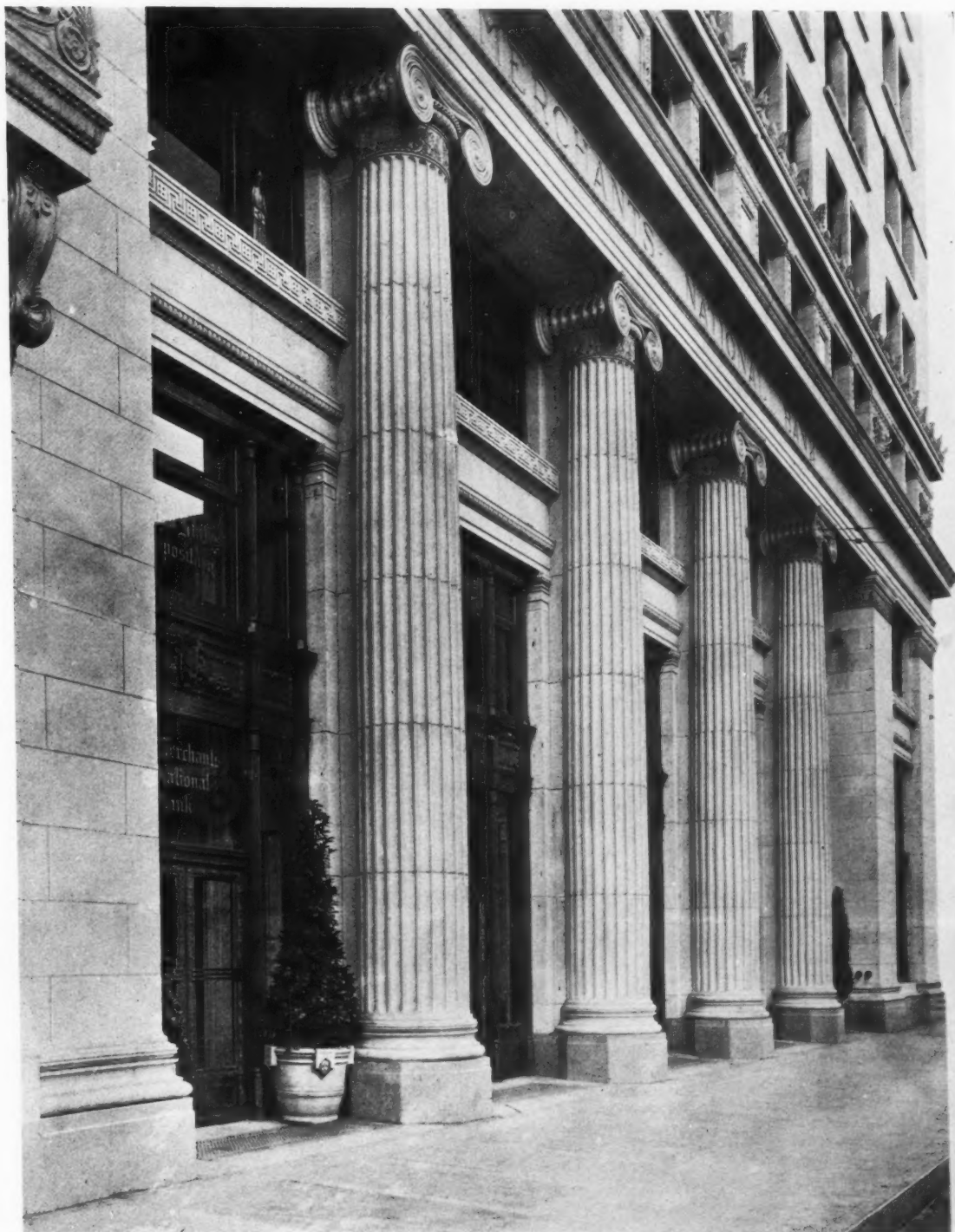


Granite Entrance to Building

Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles

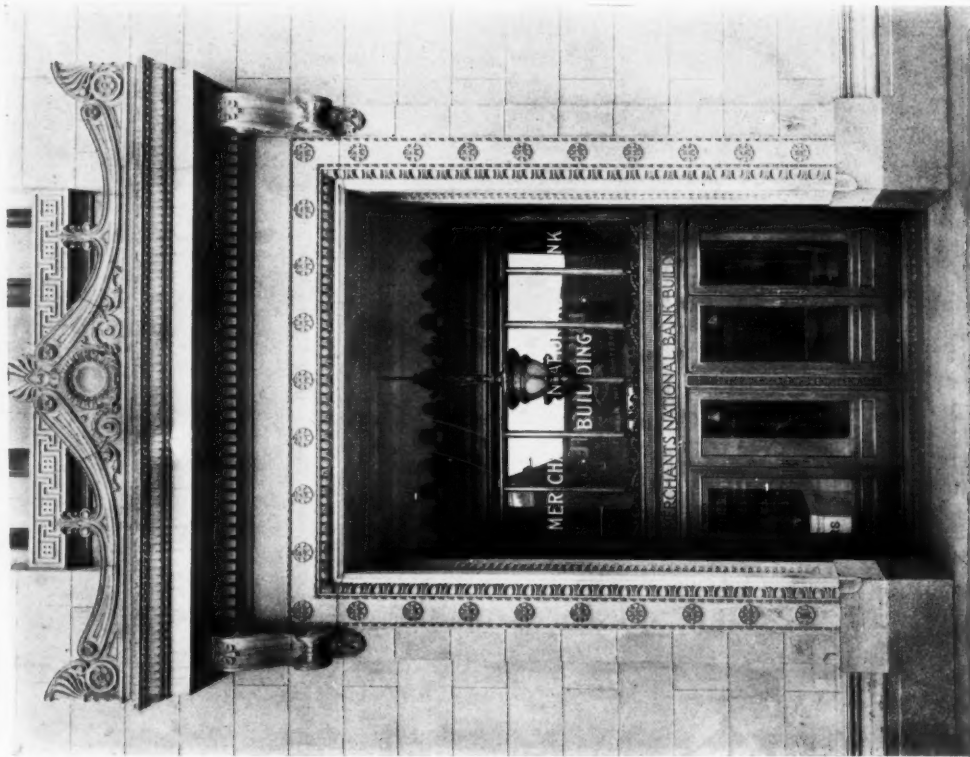


Marble Doorway to President's Private Office



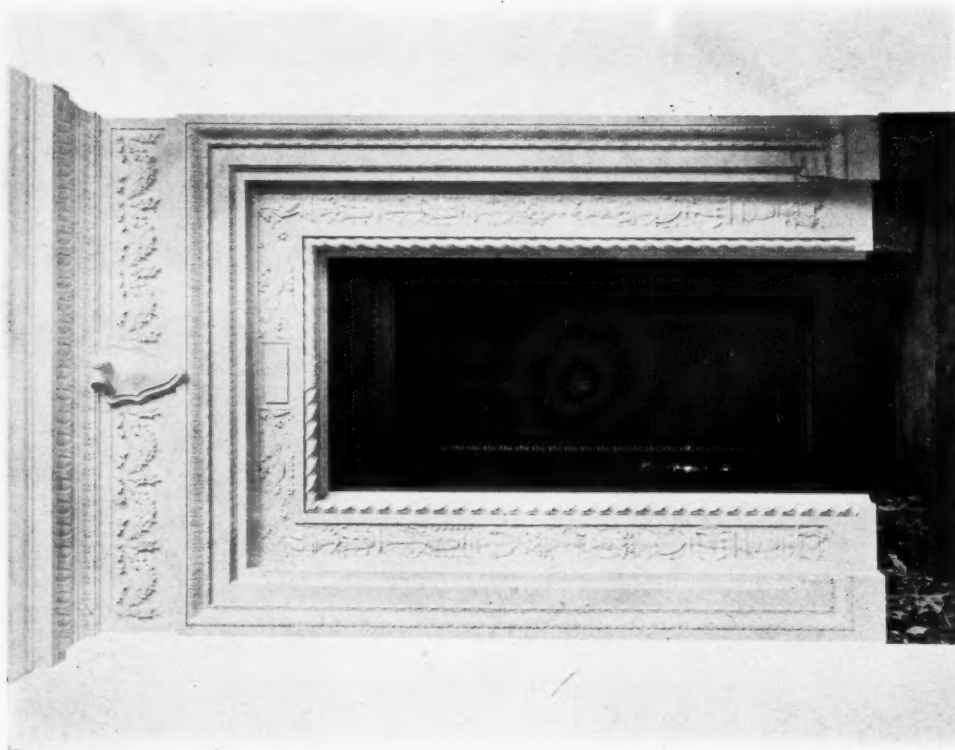
Front Elevation of Granite Work

Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles

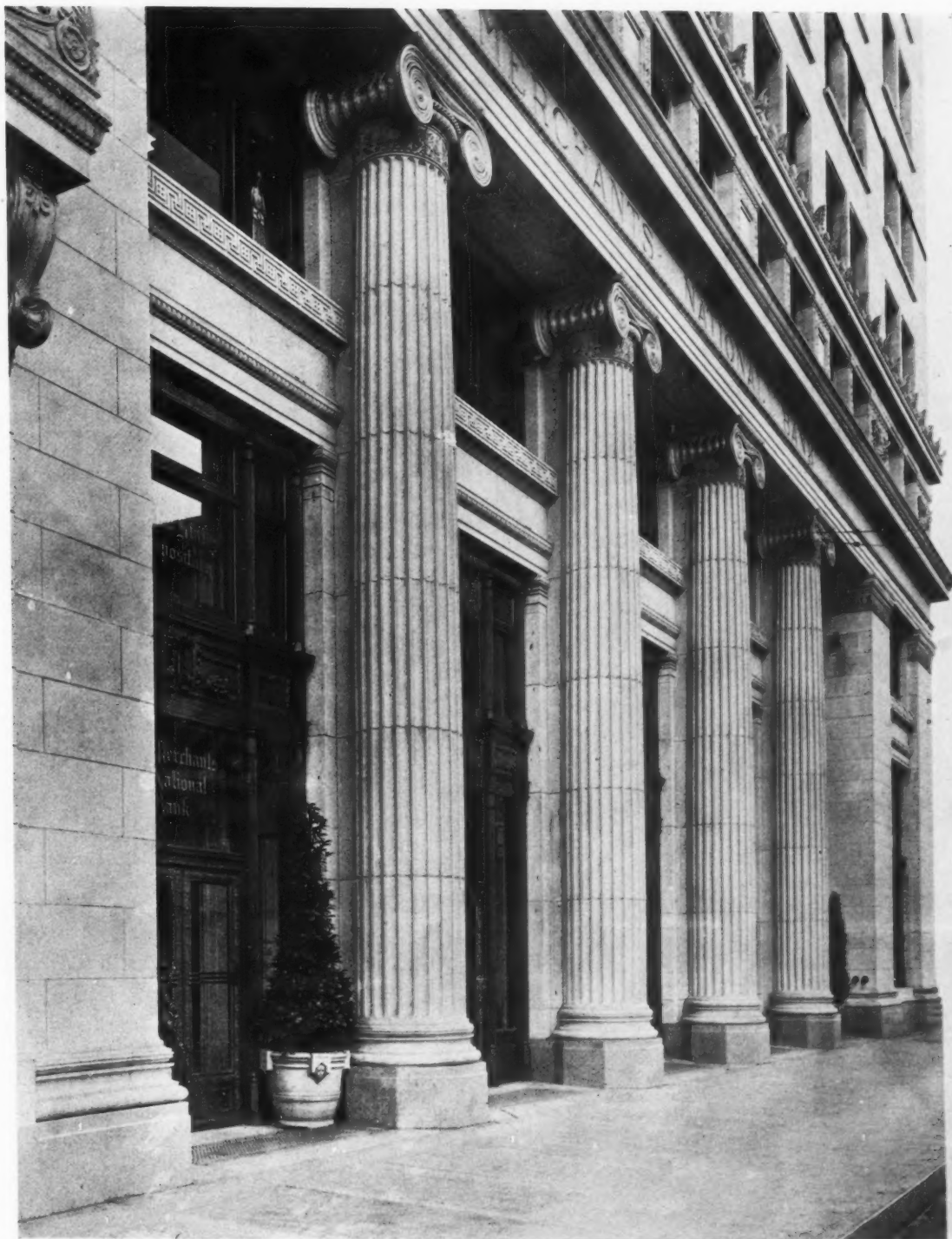


Granite Entrance to Building

Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles

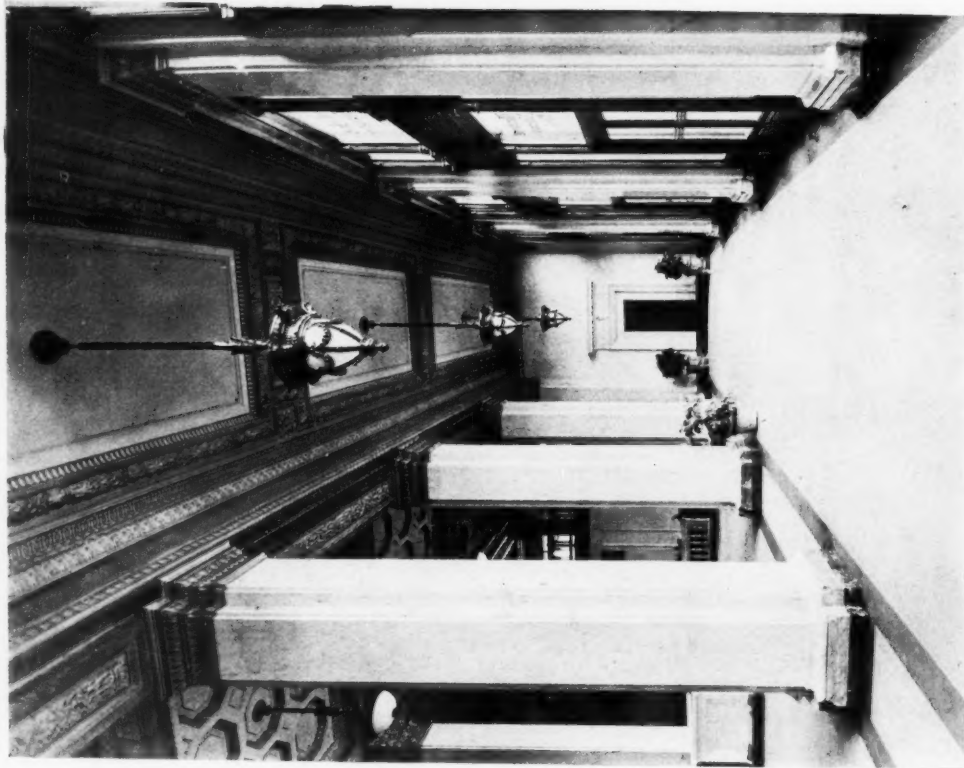


Marble Doorway to President's Private Office



Front Elevation of Granite Work

Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles

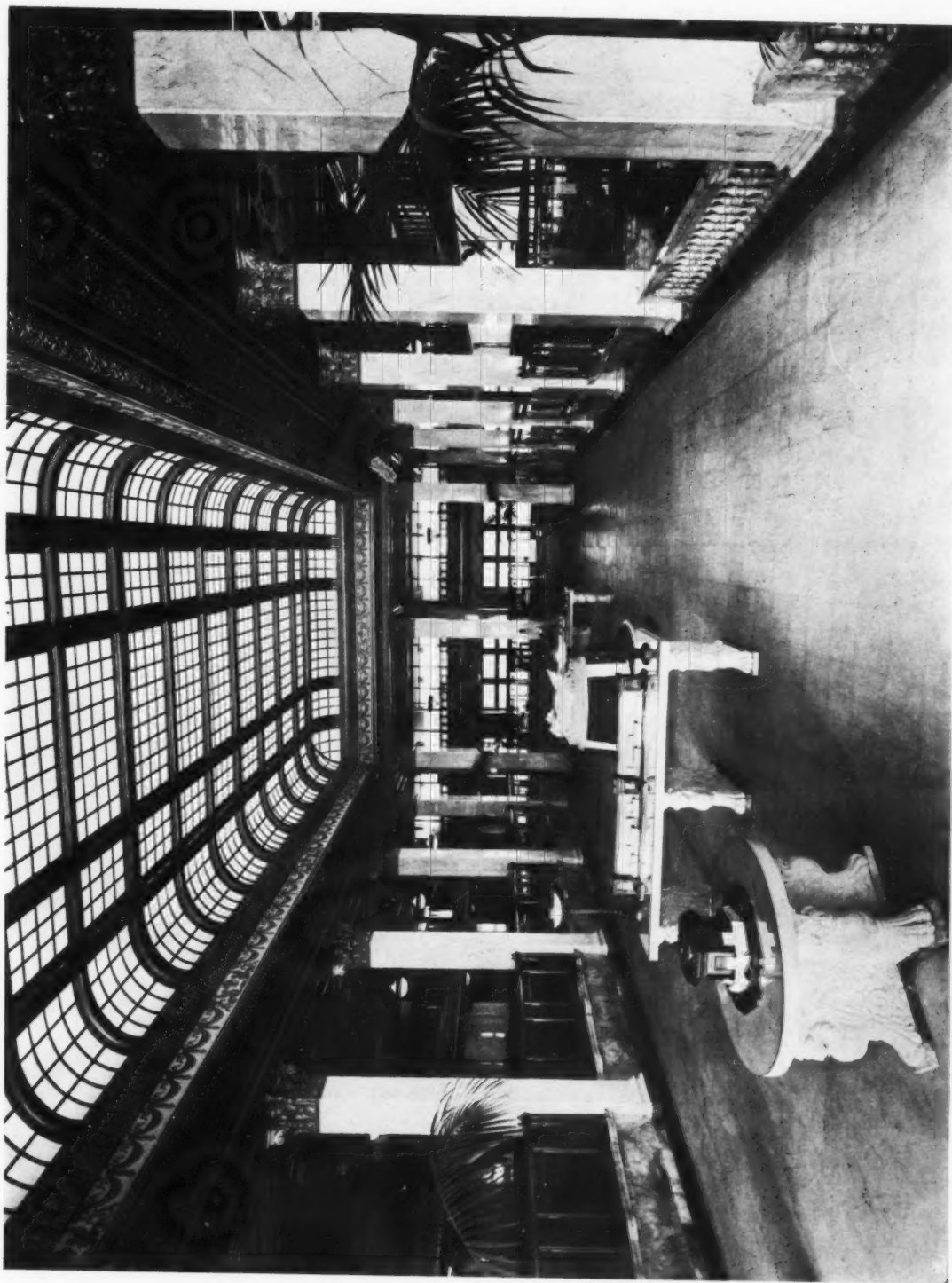


Front Loggia Main Banking Room and Entrance to President's Office at End

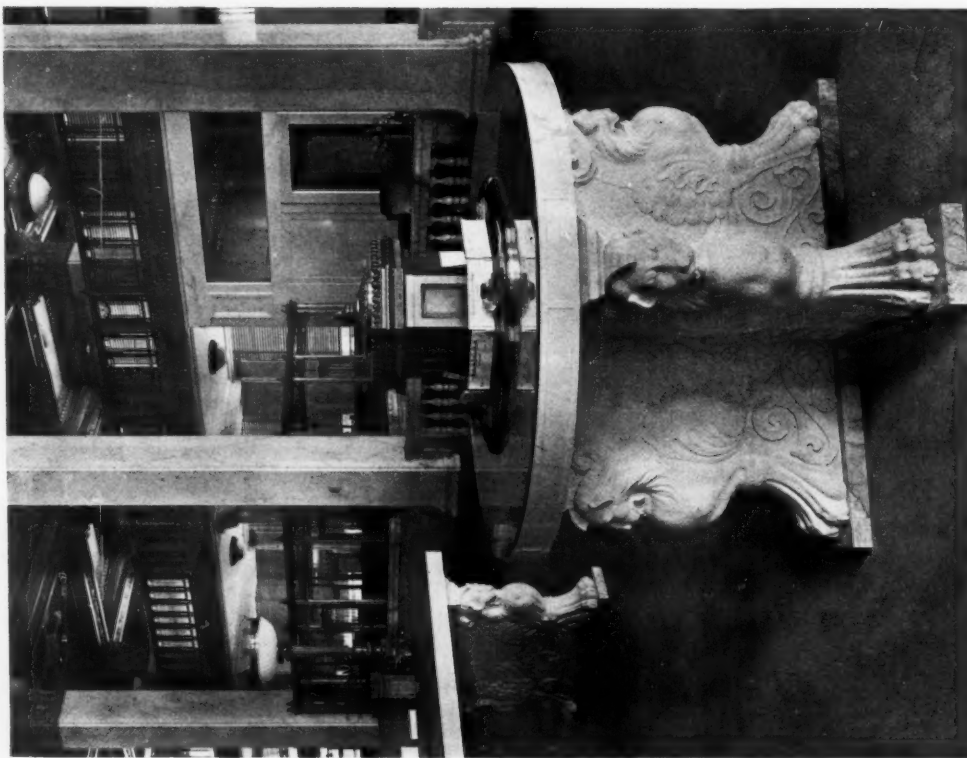


Officers' Platform

Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles

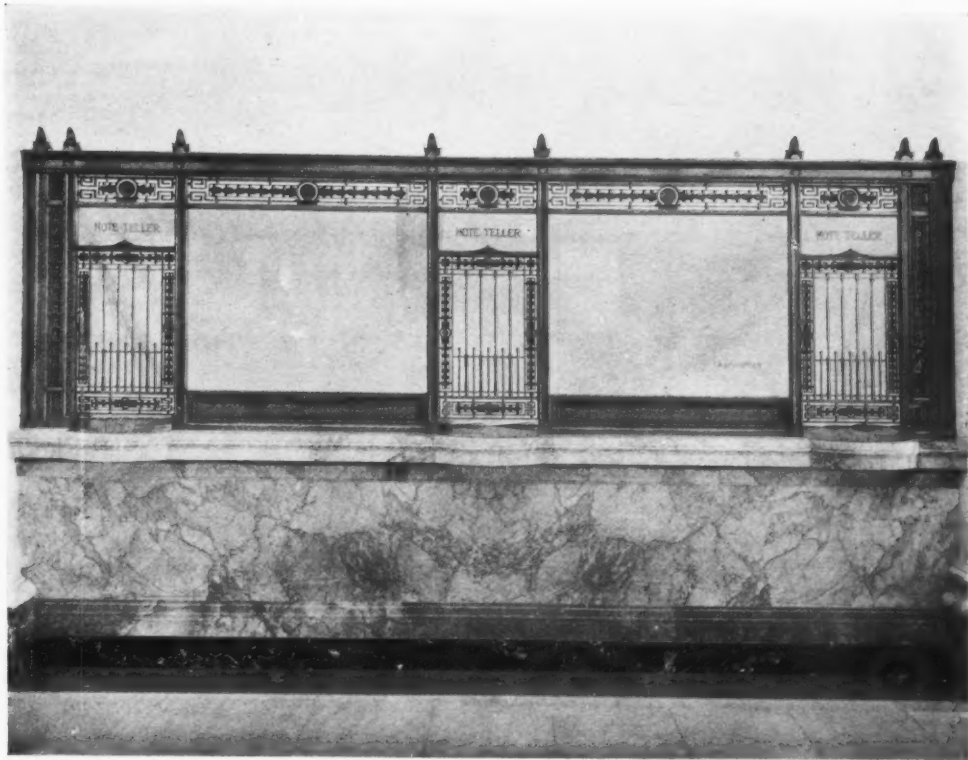


General View Interior Banking Room
Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles



Marble Tables and Bronze Check Racks

Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles

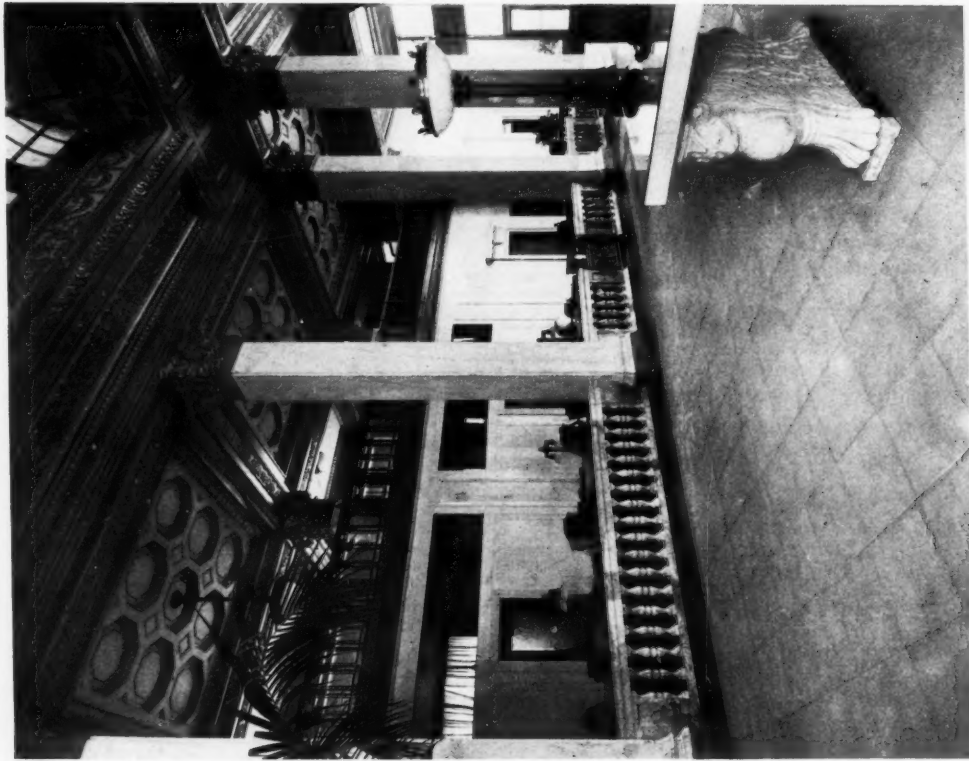


Detail of Marble Counter Front and Bronze Screen

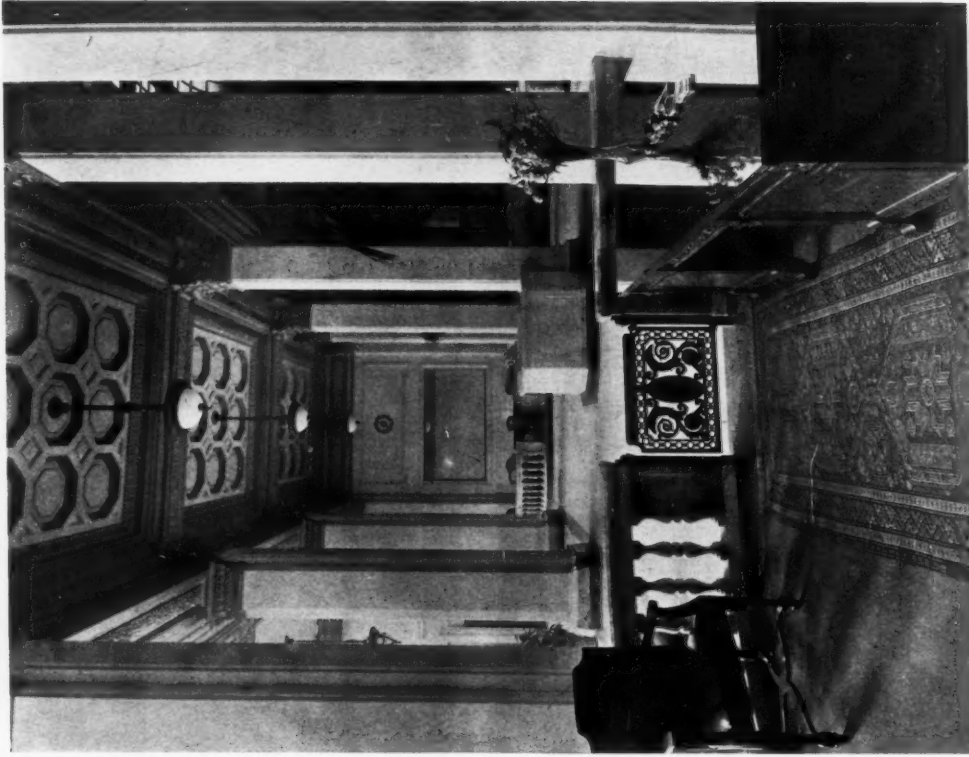


Marble Seat, Tables, etc.

Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles



View of Officers' Platform and Private Offices

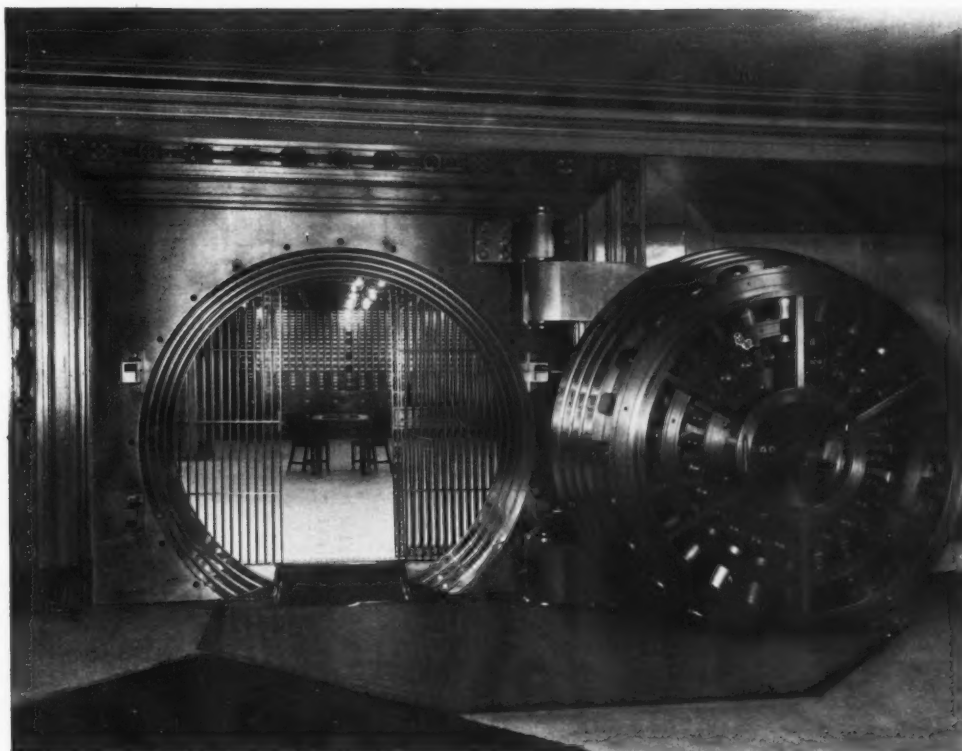


View Across Banking Room from Officers' Platform

Merchants National Bank Building, Los Angeles
William Curlatt & Son, Architects, Los Angeles

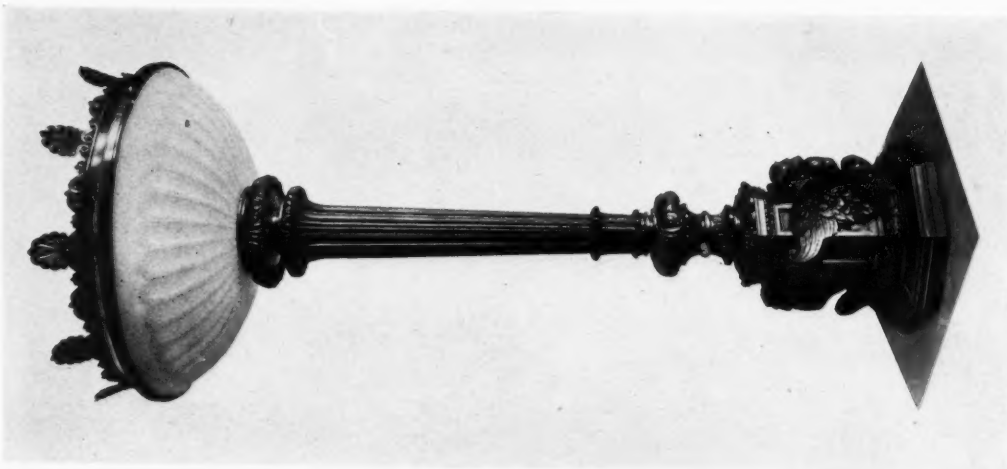


View of Safe-Deposit Lobby

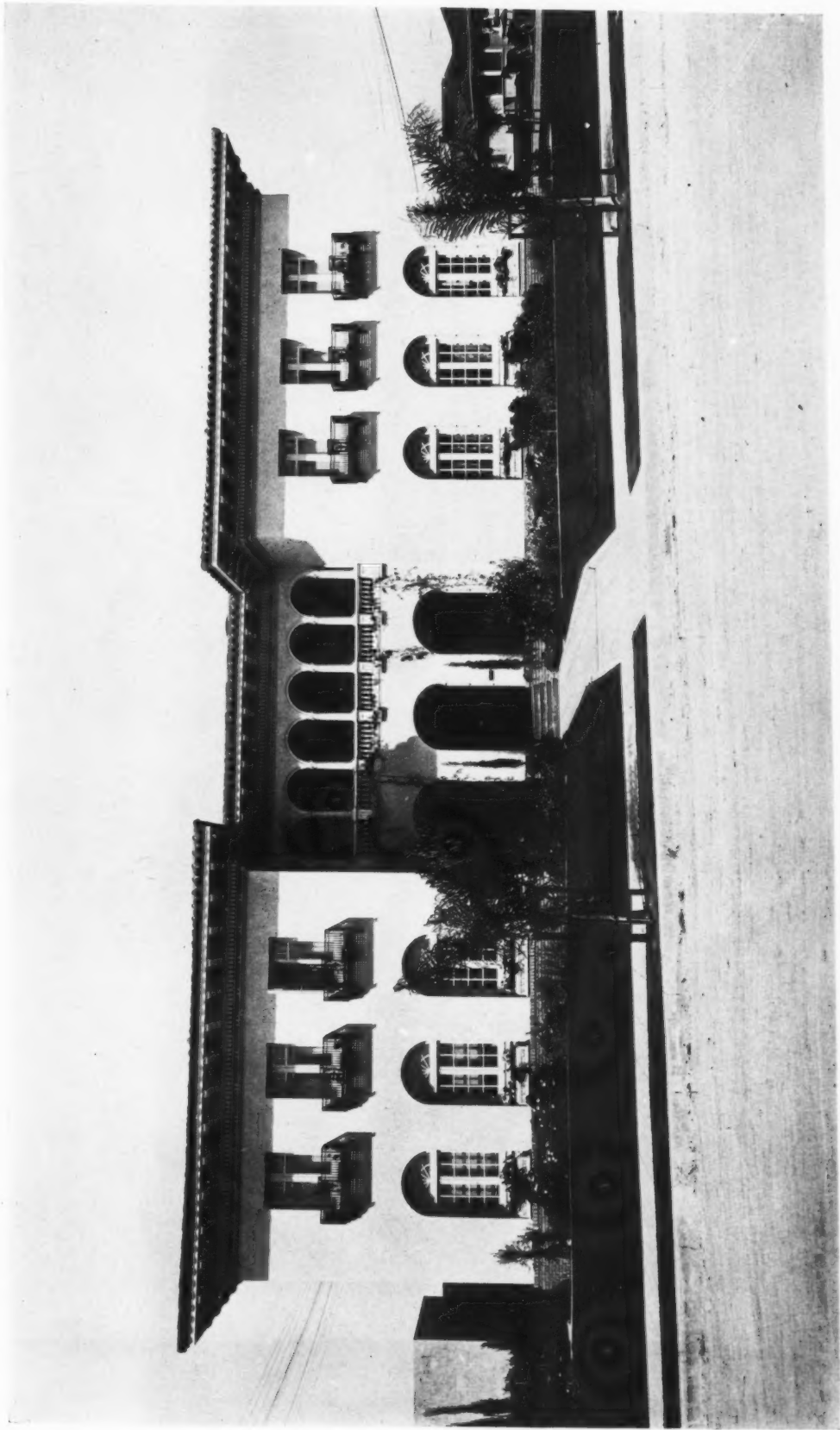


Safe-Deposit Vault Door

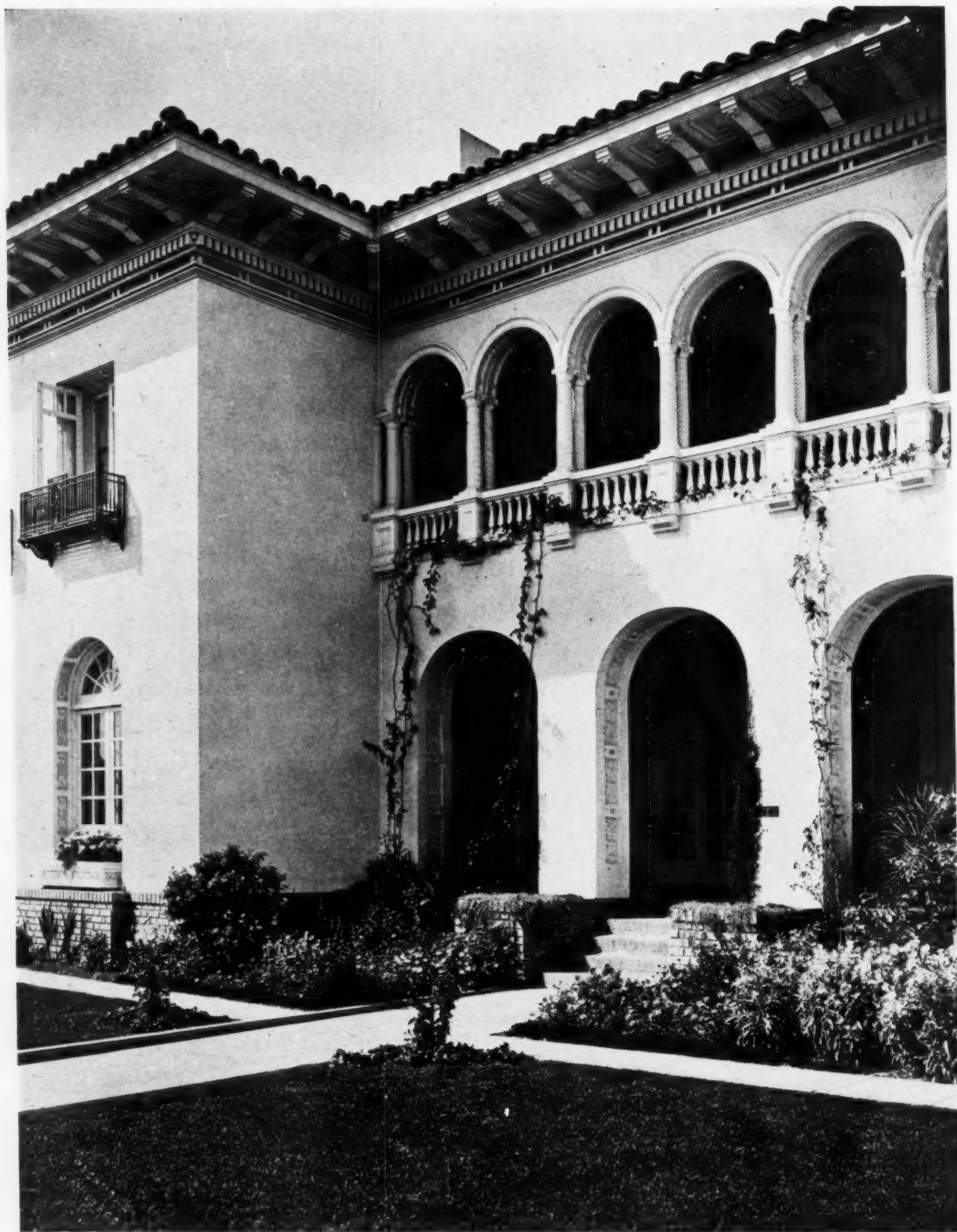
Merchants National Bank Building, Los Angeles
William Curlett & Son, Architects, Los Angeles



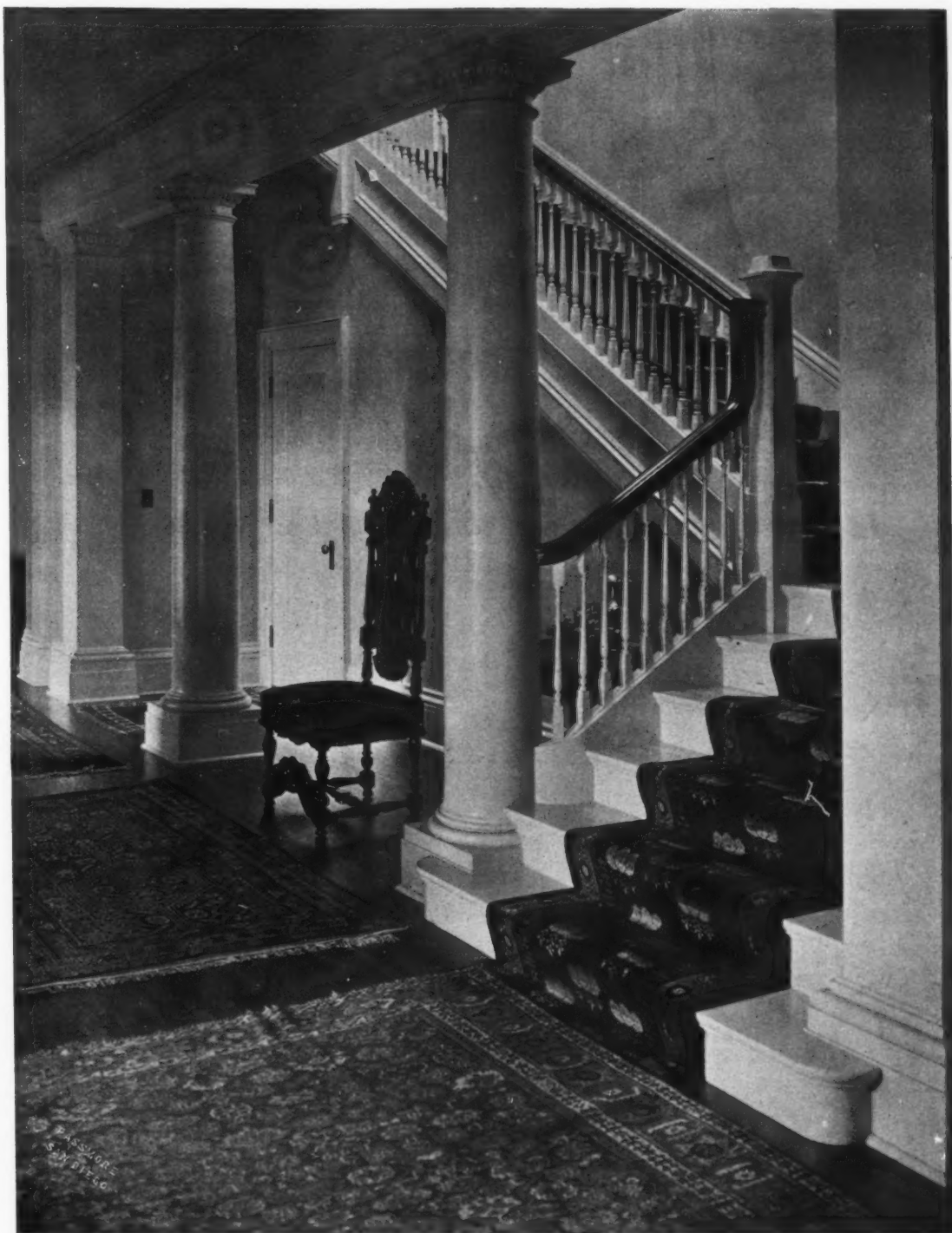
Detail of Metal Ornamentation
 Merchants National Bank Building, Los Angeles
 William Currett & Son, Architects, Los Angeles



Residence for E. H. Putnam, San Diego
Bristow & Lyman, Architects, San Diego



Detail of Entrance, Residence for E. H. Putnam, San Diego
Bristow & Lyman, Architects, San Diego



Detail of Stairway, Residence for E. H. Putnam, San Diego
Bristow & Lyman, Architects, San Diego



Reception Room, Residence for E. H. Putnam, San Diego
Bristow & Lyman, Architects, San Diego

Expert Talks on Concrete Paints

A SPECIAL ARTICLE WRITTEN BY DR. EDGAR AHRENS
CHEMIST OF THE MURALO CO., NEW YORK

Many technical articles have appeared from time to time in the trade journals, and every now and then a paper is read at a master painters' convention dealing with this topic, emphasizing the importance of concrete paints. The phenomenal growth of the American Portland cement industry, together with the wide application of cement for buildings where strength and durability are sought, account for the extensive use of this valuable material. However, there are many difficulties peculiar to the cement surface which should be given careful consideration before arriving at a conclusion as to the most appropriate coating for the purpose.

It is the province of this paper to point out some of the defects and imperfections of the average and abnormal concrete surface, and to suggest various means of overcoming these defects and to discuss the requirements of concrete paints.

The unattractive, monotonous gray tone of Portland cement and the occasional spotted and streaked appearance of concrete construction, or efflorescence necessitate not alone a decorative coating, but also a coating which will preserve the concrete in order to guard against those destructive and disintegrating influences, such as alternate heat and frost and the mechanical action of dust and mineral particles carried by the winds, also erosion and oxidation, all of which are collectively grouped under the term weathering. Before considering the best means of protecting the concrete surface against all these destructive agencies it would be well to consider the nature of concrete and its component parts, thereby giving us a better understanding of the proper preservation, at the same time enhancing its appearance.

"Concrete for permanence" is an oft-repeated phrase, but to fully realize this and give it a practical significance, it must be protected from external influences by an appropriate coating. We might call concrete an artificial stone, comparable to a natural mineral aggregate, such as sandstone, but more durable on account of its monolithic character, and further improved by suitable reinforcement, thereby taking advantage of the great tensile strength of steel, combined with the high crushing resistance of concrete. The elements of concrete are cement, sand, stone, gravel, clay, cinders and very often a high percentage of lime added to decrease permeability or tendency of water, especially under pressure, to percolate through the structure. Assuming the elements of concrete to be of good quality, the proper proportioning and blending of these components determines the soundness of the structure, while the non-observance of certain rules familiar to the concrete engineer gives rise to many difficulties.

Very often a master painter is called upon to improve the appearance and prevent the absorption of moisture of a concrete surface, and it is found, on account of the change in volume of concrete, due to alternate dampness and dryness, the results are not quite up to the owner's expectations; whereas, a knowledge of concrete defects would have shown means of avoiding imperfections in the finished work, and possibly show conditions quite beyond control of the master painter. The variation in permeability and density, also improper concrete mixes, cause hair cracks. The presence of sulphur compounds also causes the concrete to swell and crack, but this

cause is not very general, as only traces of sulphur are contained in cement; whereas, slag cements usually contain an excessive quantity of this element; however, the latter kind of cement is not used to any great extent. Careless reinforcement, or too early removal of forms in placing the concrete, difference in expansion and contraction due to the heat evolved when the cement sets, and also incorrect constructional details, all contribute to the development of cracks in concrete surfaces. Cracking, or the irregular markings of a concrete surface, is usually due to excessive troweling. The light active cement particles floating to the surface and having unequal expansion and contraction with the concrete body is the cause of crazing.

Mechanical means, such as rubbing the surface with a brick dipped in water or other abrasive, such as carborundum, should be used to eliminate hair cracks before applying concrete paint. This is only necessary if the crazing or hair cracks are pronounced and would be shown in relief after painting. Body cracks in a concrete structure may be due to several causes, some of which have been mentioned; but more particularly to the too quick removal of forms, causing internal disturbances and shrinkage from setting and hardening.

Efflorescence, or as improperly called "saltpetre," is generally known to have its origin in the cement rather than in the sand or other components in concrete. Some cements do not show efflorescence. So-called cankers on a concrete wall, causing at times the breaking away of quite large masses of concrete, can be attributed to the successive deposition of salts on the surface. The reason the efflorescence is evidenced as irregular patches on a concrete wall is due to differences in density and permeability to water. Any condition which reduces permeability, or prevents absorption of moisture, will consequently prevent deposition of soluble salts or efflorescence. This condition can be obtained by properly sealing the pores of the concrete with a tough alkali-proof cement paint.

It is well known that unseasoned concrete contains free lime, and may also contain an addition of hydrated lime, which tends to waterproof the concrete. Various metallic salts have been recommended for the neutralization of lime with more or less success. Sulphates, however, give the best results. Sulphate of alumina is very effective and economical, a solution of 15 per cent strength being applied with a brush and allowed to dry. It is best, however, to avoid all salt solutions and depend upon the neutralizing action of carbonic acid in the air; in other words, allow the concrete surface to stand at least six months before painting.

Efflorescence can be removed by washing with a weak solution of muriatic acid, one part of acid to five parts of water, and then washing the surface with clean water. This treatment, however, is expensive in time and brushes, and it is better to use a wire brush. This also does not corrode the concrete as much as acid. A concrete coating, however, if properly designed to meet conditions of excessive alkali, moisture and variation in density, irregularities and imperfections of the surface, should meet these conditions without resorting to neutralizing agents, such as salt solutions, etc., and should be made from an unsaponified vehicle and durable pig-

ments, zinc predominating. Lead and oil, or perhaps lead and zinc, with so-called reinforcing pigments, such as barytes, clay, silica, etc. are without a doubt the materials par excellence, as regards exterior painting of wooden structures, but where there is a great alkalinity linseed oil is not the logical vehicle. On a seasoned concrete surface, however, three coats of lead and oil will no doubt give a satisfactory coating if conditions are not very severe, but for wide application and general utility the most appropriate coating is one that shows little or no action when in contact with free lime and moisture.

A concrete coating conforming to these requirements can be made from certain gum resins from which the portion acted upon by the lime alkali has been removed. This is affected by heat treatment in presence of caustic alkalies or with solvents. It is manifest that if we remove the saponifiable portion of the gum resin or that component which is attacked by alkalies, the residual product will resist the lime alkali in concrete. Essentially then, what we accomplish by this process is to remove

characteristic for such purpose by drying to a hard, tough and elastic film in the presence of moisture. This is a most valuable property, for almost invariably the concrete surface is damp, or the body of the concrete contains sufficient moisture to retard the drying of linseed oil paint.

It has been remarked that oxide of zinc should be the chief component of the pigment portion of a concrete paint. Unquestionably this pigment is the most valuable for this class of work, but if used exclusively would harden the paint film to such an extent that volume changes of concrete, causing expansion and contraction, would not be provided for. It is therefore desirable to modify this tendency of zinc oxide by an addition of calcium carbonate, asbestine or other so-called inert pigments, or preferably a combination of lead zinc pigments.

From what has been said concerning the nature of concrete, its almost invariable dampness and caustic condition, variation in density, presence of soluble salts, etc.,



Pasadena Residence, exterior of which is finished with two coats in white of The Muralo Company's Concrete Cement Coating

the substance which would otherwise be subject to decay by the action of lime if incorporated in the paint vehicle. Of course, the presence of this component in the vehicle of a concrete paint if acted upon by lime would weaken the paint film, and consequently the concrete coating would not fulfill its purpose; that is, preserving and decorating the concrete surface upon which it is applied. Wood oil heated to a high temperature is also indurated against lime and acquires the valuable

emphasizes the necessity of a concrete coating designed to provide against these adverse conditions, and that there is good ground for the existence of the modern concrete coating would hardly be denied by any master painter. Furthermore, actual service tests have demonstrated conclusively the utility of the prepared concrete coating, not alone on account of its economy but also because it fulfills its purpose of enhancing and preserving a concrete surface.

INDUSTRIAL INFORMATION

The Putnam residence, San Diego, illustrated in this issue, is roofed with tile from the factory of the Los Angeles Pressed Brick Company, Los Angeles.

Architect G. H. Hausen, San Diego, has given up his office in the Timken Building, and is now located at his home address, 2030 Twenty-ninth Street, where he has fitted up a studio.

The Meyberg Company, designers and manufacturers of lighting fixtures, at 631-635 South Grand Avenue, Los Angeles, executed a big contract in the manufacture and installation of all lighting fixtures in the Merchants National Bank Building, Los Angeles. These fixtures were all manufactured in the company's factory, and all bronze castings were molded in the foundry which this company operates. The Meyberg Company more than gets its share of the big work in Los Angeles and vicinity. The officials of the company are especially trained, and specialize in this class of work, and are responsible for the creation of many handsome perfectly arranged designs.

Gruenfeld & Rieker, architectural molders and sculptors furnished all ornamental stucco work for the Merchants National Bank Building of Los Angeles. This was an unusually large contract, the above firm being kept busy for over four months in the completion of same. Gruenfeld & Rieker enjoy a wide reputation for their staff, stucco and composition ornaments, and models for cement, stone and metal work. They have received considerable praise for their stucco work in the Merchants National Bank Building.

C. J. Kubach Company, building constructors, located at 701 Merchants National Bank Building, Los Angeles, were the general contractors in the construction of that building. The ability of this company to execute construction work in a highly satisfactory manner was never better exemplified than in their building of the Merchants National Bank Building.

Howe Brothers, 1198 San Pedro Street, Los Angeles, installed the plumbing, gas, air and vacuum systems in the Merchants National Bank Building, northeast corner Spring and Sixth Streets, Los Angeles, illustrated in this magazine.

The firm of Howe Brothers is one of the largest and the oldest plumbing and hardware establishments in Southern California, and they are also distributing agents in Southern California, Utah, Nevada, Arizona and New Mexico for the Keasbey & Mattison Company's line of asbestos and magnesia products.

The Pacific Fireproofing Co., H. W. Hellman Building, Los Angeles, furnished the plain and ornamental furring and lathing for the Merchants National Bank Building, Los Angeles.

The annual convention of the Clay Workers' Association of Oregon, will be held at Salem, March 30th and 31st. It is believed that forty or more delegates representing brick and tile workers of that state will attend. The arrangements are in charge of William E. Wilson, of Salem, President of the Association.

Rudgear-Merle Co., San Francisco, manufactured and installed the ornamental iron and bronze work in the Merchants National Bank Building, Los Angeles.

S. T. Johnson, 1337 Mission Street, San Francisco, has mailed out a forty-page catalogue of unusual interest and value on the subject of "Modern Oil Burning Equipment," and it should prove of worth to those seeking information on this subject.

Architects Norton & Wallis of Los Angeles are receiving much praise for their work in planning the recently completed Universal City, described as one of the greatest moving picture cities of the world, and the metropolis of the movies near Los Angeles.

The completion of the work was formally celebrated last month, at which time, men prominent in the moving picture industry from all parts of the country, gathered at Universal City, to do honor to the occasion.

Universal City represents the investment of more than \$6,000,000, and occupies 800 acres of land in San Fernando Valley. Fifteen strong and substantial buildings, in the Mission style of architecture of hollow tile and reinforced concrete constitute the principal buildings.

Simplex windows, product of the Simplex Window Company, San Francisco, were installed in the Merchants National Bank Building, Los Angeles. The execution of this contract has resulted in the use of an invention that represents the last word and latest improvement in windows. The reception and demand for the Simplex windows is indicated by the firm approval for the product. The Simplex windows are durable and strong, and have stood the test of rainy seasons, proving themselves in every particular to be satisfactory. The metal fixtures on these windows are all sherardized, which makes them impervious to rust, or the action of the elements.

The windows reverse wholly outside, remaining open in any desired position, are weather and burglar-proof, and do not rattle. The manner in which they furnish and circulate fresh air is a most necessary convenience.

Anyone interested in the window will be furnished with an interesting booklet describing the same, upon request to the Simplex Company, which also maintains full-sized models on display at the San Francisco show rooms.

The American Marble and Mosaic Company, has completed installation of one of the finest and most elaborately carved bank interiors anywhere in the West, in the Merchants National Bank Building, Los Angeles. The jointing of this work is a special feature, and the long lengths throughout are extremely remarkable. There are no thin return joints to be found anywhere, as all corners throughout are solid pieces of marble. The counterfaces, basis, railings, etc., are all old convent gray Sienna marble, cut from an exceptionally large block, specially imported from Italy. This block is said to be one of the largest pieces of marble ever brought into this country.

The marble treatment throughout the bank building conveys unusual distinction upon the American Marble and Mosaic Company. The work has met with extraordinary favor by all who have had the pleasure of visiting the bank and building.

PACIFIC COAST CHAPTERS, A. I. A.

THE PACIFIC COAST ARCHITECT is the official organ of the San Francisco Chapter of the American Institute of Architects.

San Francisco Chapter, 1881—President, William B. Faville, Balboa Building, San Francisco, Cal. Secretary, Sylvain Schnaittacher, First National Bank Building, San Francisco, Cal.
Chairman of Committee on Public Information, William Mooser, Nevada Bank Building.
Chairman of Committee on Competition, Geo. B. McDougall, 235 Montgomery Street.
Date of Meetings, third Thursday of every month; annual, October.

Southern California Chapter, 1894—President, A. C. Martin, 430 Higgins Building, Los Angeles, Cal. Secretary, Fernand Parmentier, Byrne Building, Los Angeles, Cal.
Chairman of Committee on Information, W. C. Pennell, Wright & Callender Building, Los Angeles.
Date of meetings, second Tuesday (except July and August), (Los Angeles).

Oregon Chapter, 1911—President, A. E. Doyle, Worcester Building, Portland, Ore. Secretary, William G. Holford, Chamber of Commerce Building, Portland, Ore.
Chairman of Committee on Public Information, William G. Holford.
Date of meetings, third Thursday of every month, (Portland); annual, October.

Washington State Chapter, 1894—President, James H. Schack, Lippy Building, Seattle, Wash. Secretary, Arthur L. Loveless, 513 Coleman Building, Seattle, Wash.
Chairman of Committee on Public Information, J. S. Cote, 520 Haight Building, Seattle.
Date of meetings, first Wednesday (except July, August and September), (at Seattle except one in spring at Tacoma); annual, November.

Colorado Chapter, 1892—President, W. E. Fisher, Railway Exchange Bldg., Denver, Col. Secretary, Aaron M. Gove, 519 Boston Bldg., Denver, Col.
Chairman of Committee on Public Information, Arthur A. Fisher, 459 Railway Exchange Building, Denver, Colo.
Date of meetings, first Monday of every month (Denver, Colo.); annual, September.

THE AMERICAN INSTITUTE OF ARCHITECTS. The Octagon, Washington, D. C.

OFFICERS FOR 1915.

President.....R. Clipston Sturgis, Boston, Mass.
First Vice-President.....Thomas R. Kimball, Omaha, Neb.
Second Vice-President, D. Knickerbacker Boyd, Philadelphia, Pa.
Secretary.....Burt L. Fenner, New York City, N. Y.
Treasurer.....J. L. Mauran, St. Louis, Mo.

BOARD OF DIRECTORS.

For One Year.

John Hall Rankin, Philadelphia.
C. Grant LaFarge, 25 Madison Sq., N., New York, N. Y.
H. Van Buren Magonigle, 7 West 38th St., New York, N. Y.

For Two Years.

Octavius Morgan, 1126 Van Nuys Bldg., Los Angeles, Cal.
W. R. B. Willcox, Central Bldg., Seattle, Wash.
Walter Cook, New York, N. Y.

For Three Years.

Charles A. Coolidge, Boston, Mass.
Charles A. Favrot, New Orleans, La.
Elmer C. Jensen, Chicago, Ill.

SAN FRANCISCO CHAPTER, A. I. A.

The regular monthly meeting of the San Francisco Chapter of the American Institute of Architects was held at the Tait-Zinkand Cafe, 168 O'Farrell Street, on Thursday, March 18, 1915. The meeting was called to order at 1 o'clock by Edgar A. Mathews, in the absence of the President, Mr. Faville.

Minutes: The reading of the minutes was deferred until the next meeting.

Legislative Committee: For this committee, Mr. Mathews gave a summary of the work of this committee to date.

Communications: The reading of communications was deferred until the next meeting.

Adjournment: There being no further business before the Chapter, the meeting adjourned at 1:30, subject to the call of the chair.

Subject to approval,, 1915.

SYLVAIN SCHNAITTACHER,
Secretary.

SOUTHERN CALIFORNIA CHAPTER, A. I. A.

The eighty-second meeting of the Southern California Chapter of the American Institute of Architects was held at the Hollenbeck Cafe, Los Angeles, California, Tuesday, March 9, 1915.

The meeting was called to order at 8:10 p. m. by President A. C. Martin.

The following members were present:

D. C. Allison	John P. Krempel
J. J. Backus	A. C. Martin
A. B. Benton	H. H. Martin
C. H. Brown	S. B. Marston
F. P. Davis	B. M. Morris
Theo. A. Eisen	S. T. Norton
Lyman Farwell	Robt. H. Orr
P. H. Frohman	T. F. Power
Chas. Gordon	Aug. Wackerbarth
Frank D. Hudson	A. R. Walker
J. W. Krause	H. F. Withey

As guests of the Chapter were present, Mr. Charles Henry Cheney, Architect and City Planner; J. H. Bean, member of the Los Angeles City Board of Education; G. Gordon Whitnall, Secretary of the City Planning Association of Los Angeles; G. D. Donald and C. J. Shults, assistants to Mr. Cheney; W. E. Prine and H. K. Hensley, of the Southwest Contractor, and William Dellamore and John Bowler, of the Builder and Contractor.

The minutes of the eighty-first meeting were read and approved.

For the Board of Directors, the Acting Secretary reported that one meeting had been held on March 9, 1915; that letter ballots had been opened with the result that Mr. G. B. Van Pelt had been declared elected to regular membership; that the application for membership had also been received from Mr. Louis J. Gill, of San Diego, and the Acting Secretary instructed to send out letter ballots to the members.

Following the report of the Directors, Mr. Octavius Morgan reported for the Committee on Entertainment that they had secured Mr. Charles Henry Cheney to talk before the Chapter at this meeting.

For the Committee on Permanent Legislation, Mr. Octavius Morgan reported that the State Board of Architecture had presented certain Amendments to the Practice Law before the present Legislature.

For the Committee on Ethics and Practice, it was reported by the President that he had accepted the resignation of Mr. J. E. Allison, and would immediately fill the vacancy caused thereby.

For the A. I. A. Committee on Education, Mr. D. C. Allison reported that satisfactory work was being done in the way of Atelier work.

For the Special Committee on Contracts and Specifications Mr. Norton reported one meeting held and that matters will be presented for the Chapter's consideration at the following meeting.

For the Exhibition Committee, Mr. H. F. Withey reported that Miss M. L. Schmidt was making a satisfactory canvass in her efforts to secure a small permanent exhibit in the Metropolitan Building.

Communications were next read as follows:

From Fernand Parmentier, Secretary of the Southern California Chapter, testifying his appreciation in his elevation to Fellowship. This communication upon motion made, seconded and duly passed, was ordered spread upon the minutes.

From Mr. Burt L. Fenner, Secretary of the American Institute of Architects, requesting an expression from the Chapter as to the number of members who would probably join in an excursion to the Pacific Coast.

From the editor of the Daily Report, Ontario, requesting that the Chapter recommend an architect to handle certain works of a private nature.



INTERIOR OF BANKING ROOM,
MERCHANTS NATIONAL BANK, LOS ANGELES

WILLIAM CURLETT & SONS, ARCHITECTS,
LOS ANGELES

Columns—Colorado Yule selected and in one length
Base—Black and Gold
Counter—Montaretti Gray Siena
Furniture—Colorado Yule selected
Flooring—Gray Tennessee, with Tavernelle and Belgian Black Borders

ALL THE MARBLE FOR THIS BANK FURNISHED BY

American Marble & Mosaic Company

San Francisco, California

A. F. EDWARDS, President
W. A. GOERCKE, Vice-Pres.
J. A. MACKENZIE, Secy.

JOHN M. FARRIS, Asst. Mgr.
CHAS. F. EISELE, Asst. Mgr.
JOHN RUIOLO, Asst. Mgr.

Artisans in

MARBLE - ONYX - MOSAIC

City Factory and Office:
25-29 Columbia Square, near Folsom, bet. 6th and 7th
Phone Market 5070

Main New Factory:
On Canal, South San Francisco

From Mr. E. C. Kemper, asking the co-operation of the Chapter in distributing Institute documents, including the Circular of Advice, Competition Program, and the Canons of Ethics.

From Mr. Burt L. Fenner, Secretary of the American Institute of Architects, explaining the purpose and intentions of that portion of the By-Laws referring to the recommendations of Chapters for Fellowship in the Institute and advising the Chapter that nominations will be closed upon May 1, 1915. It was moved by Mr. Frank D. Hudson, duly seconded, that nominations for eligible Fellows be made from the floor. Mr. Octavius Morgan offered a substitute motion that all eligibles be regarded as candidates, and that a general ballot be sent out to all Chapter members containing the names of all such eligibles. This substituted motion, duly seconded, was carried.

From J. E. Kienle, Executive Secretary of the Bureau of Housing Commission, city of Los Angeles, requesting that the Chapter appoint a Judge for the Architectural Competition on Housing. Upon motion made, seconded, and duly carried, J. E. Allison was selected to act for the Southern California Chapter.

Under the head of unfinished business, the Acting Secretary reported that no communication had as yet been received from the Institute relative to the inquiry made regarding the adoption of the Institute's Code of Ethics, and action thereon would therefore have to be deferred until the following meeting.

Under the head of papers and discussions, Mr. Charles Henry Cheney gave a talk, illustrated by lantern slides, on the work of the State Bureau on Housing and Immigration. These pictures presented by Mr. Cheney were secured for the State Commission from many cities throughout the country, and pictured both the evil and the remedy.

Following this most interesting and educational address, Mr. Cheney presented a brief outline of the five Housing Bills now before the State Legislature and the four City Planning Bills also in the hands of that body for legislative action.

Following this presentation of legislative matters, the President threw the meeting open for questions and for general discussion.

Mr. Cheney requested the Chapter's endorsement of these measures, and upon motion made by Mr. Octavius Morgan, seconded by Mr. Frank D. Hudson, and duly passed, it was resolved that this Chapter endorse the intents and purposes of the City Planning Bills now before the Legislature and communicate an endorsement in the form of resolutions to the proper parties in Sacramento.

Following a general discussion it was then moved by Mr. Morgan, seconded and duly passed, that this Chapter endorse the principles and purposes of the Housing Bills in so far as endorsement was possible without a thorough and complete knowledge of detailed provisions therein contained; that such endorsement be in the form of a resolution addressed to the proper parties in Sacramento approving the principles of improving housing conditions of the poor, and providing proper legislation for its enforcement.

Mr. John P. Krenpel moved, seconded by J. J. Backus, that a vote of thanks be accorded Mr. Cheney for his able talk. The motion was passed.

Following, Mr. J. H. Bean addressed the Chapter with a few remarks relative to the work of the Board of Education in improving social conditions about the Macy Street School, and other districts.

The meeting adjourned at 11:30 p. m.

By A. R. WALKER, FERNAND PARMENTIER,
Acting Secretary. Secretary.

San Francisco—Architects Koenig & Christiansen, Humboldt Bank Building, San Francisco, have completed plans for a three-story and basement, reinforced concrete apartment house to be erected for O. A. Cramer of Los Gatos, on the east side of Hyde Street, south of Turk, at a cost of \$30,000.

San Francisco—Architect Earl B. Scott, Humboldt Bank Building, San Francisco, has completed plans for a four-story and basement, brick and steel apartment house, to be erected for William A. Hench, on the north side of Pine Street, west of Grant Avenue, at a cost of \$32,000.

OREGON CHAPTER, A. I. A.

Held at the University Club, March 18, 1915. Meeting called to order by the President. The following were present: Doyle, Holford, Smith, Knighton, Schacht, Fouilhoux, Beckwith, Naramore and Lazarus.

Minutes for meeting held January 21, 1915, were approved as printed and distributed.

Committee Reports—Municipal Plans and Affairs: As the chairman was not present, Mr. Doyle outlined the work the committee had done in advising with the Hood River committee on the Benson Testimonial to be erected on the Columbia Highway. He also stated he advised Mr. Johnson that the Chapter would pay his traveling

expenses to Hood River to consult with the Hood River committee.

Moved by Mr. Naramore, seconded by Mr. Knighton and carried, that the Treasurer be authorized to pay expenses incurred by Mr. Johnson on his trip to Hood River.

Programme and Entertainment: Mr. Naramore reported that he had endeavored to secure speakers to meet with Chapter, but has had no success up to date as the parties approached had previous engagements. He expected to secure a speaker for the next meeting.

Membership: No report.

Building Laws: Mr. Fouilhoux presented a report recommending that the Chapter endorse such changes in the building code, as may be made consistent with safety, tending to decrease the cost of building, particularly by the introduction of lumber.

Moved by Mr. Beckwith, seconded by Mr. Schacht and carried, that the Secretary be instructed to write a letter to the Building Code Revision Committee stating that the Chapter favor such changes in the code tending to decrease cost of building operation as can be made consistent with safety.

Publicity Committee: Lazarus, local member of A. I. A. Publicity Committee, read communications which he had received for local use.

Competition Committee: No report.

Committee on Professional Practice: Mr. Lazarus submitted a written report stating that his committee did not agree with the findings of last year's committee as regards the use of a local schedule and recommended the use of the published schedule of the Institute.

Moved by Mr. Fouilhoux, seconded by Mr. Schacht and carried, that the report be accepted.

Education and League: No report.

Communications: Letter from H. Hopkins Jenkins, of Jefferson High School, asking that the Chapter appoint a representative to act on a committee having charge of the securing of statute of Thomas Jefferson, to be located in the school building, was read. President appointed Mr. Folger Johnson, Chairman Municipal Plans and Affairs, to act on this committee.

The President was obliged to leave, and asked Mr. Naramore to take the chair.

Invitation from New York Chapter as follows was read:

"At a recent meeting of the Executive Committee of the New York Chapter, A. I. A., the hope was expressed that members of other Chapters passing through New York might feel that they were welcome at our Chapter meetings, and it was resolved that an invitation be extended to all members of other Chapters to be the guests of the New York Chapter on these occasions. I take pleasure, therefore, in notifying you that the meetings of the Chapter are held on the second Wednesday of every month, except July, August and September, at the Fine Arts Building, No. 215 West Fifty-seventh Street, at 8:30 P. M., and I will ask you to assure the members of your Chapter of a cordial welcome at any meetings they may find it convenient to attend."

Letter from Builders' Exchange requesting representative to advise with their committee on the "Oregon Fir" campaign, was read. Mr. Fouilhoux was appointed to act.

New Business: Moved by Mr. Beckwith, seconded by Mr. Fouilhoux and carried, that as undoubtedly many of the Eastern architects will pass through Portland during the year, an invitation be extended to all the Chapters to meet with our Chapter, giving the dates of Chapter meetings and address of Secretary.

Moved and carried that the meeting adjourn.

WM. G. HOLFORD, Secretary.

WASHINGTON STATE CHAPTER, A. I. A.

The regular March meeting of the Washington State Chapter, A. I. A., was held on March 3, 1915, on the twenty-first anniversary of the founding of the Chapter, with sixteen members present. Chas. H. Bebb and Chas. Saunders, two of the original members of the chapter, were present, Mr. Saunders being the first Secretary.

Aside from routine work, the following business was transacted:

Arthur E. Harvey of Seattle, and J. Stanley Piper of Bellingham, were elected to membership.

It was voted to extend an invitation to the Board of Directors of the Institute, and other visiting architects, en route to or from the proposed meeting in San Francisco during the Panama-Pacific Exposition to stop off at Seattle. Preference was expressed to the fall as the time for the excursion.

It was decided to communicate with the architect of the Treasury Department of the Government, favoring the use of suitable local stone in the new building of the Treasury Department at Everett, bids for which are to be opened March 21st.

The Chapter went on record favoring the plan for the lay-out of the Capitol Grounds at Olympia, won in national competition by Wilder & White of New York, and adopted by the Capitol Commission as the scheme to be followed in the future.

ARTHUR L. LOVELESS,
Secretary.

